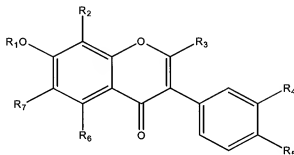


**APPENDIX A**  
**CLEAN COPY OF CLAIMS AS AMENDED HEREIN**

7. A method of reducing alcohol consumption in a mammal comprising administering a compound of Formula I



Formula I

wherein:

R<sub>1</sub> is selected from the group consisting of hydrogen, carboxy, halo, branched or straight chain (C<sub>1</sub>-C<sub>6</sub>)haloalkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkoxy, (C<sub>1</sub>-C<sub>6</sub>)haloalkoxy, (C<sub>3</sub>-C<sub>6</sub>)cyclohaloalkoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkoxyalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkylcarbonyl, substituted or unsubstituted phenyl, phenyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, and heterocyclyloxy, heterocyclylcarbonyl, wherein substituents are from one to four and are selected from the group consisting of halo, aminocarbonyl, aminothiocarbonyl, carboxy, formyl, hydroxy, amino, carbamoyl, (C<sub>1</sub>-C<sub>3</sub>)alkyl, (C<sub>1</sub>-C<sub>3</sub>)haloalkyl, (C<sub>1</sub>-C<sub>3</sub>)alkoxy, (C<sub>1</sub>-C<sub>3</sub>)haloalkoxy, (C<sub>1</sub>-C<sub>3</sub>)alkylamino, di(C<sub>1</sub>-C<sub>3</sub>)alkylamino, (C<sub>1</sub>-C<sub>2</sub>)alkoxy(C<sub>1</sub>-C<sub>2</sub>)alkyl, (C<sub>1</sub>-C<sub>2</sub>)alkylamino(C<sub>1</sub>-C<sub>2</sub>)alkyl, di(C<sub>1</sub>-C<sub>2</sub>)alkylamino(C<sub>1</sub>-C<sub>2</sub>)alkyl, (C<sub>1</sub>-C<sub>3</sub>)alkylcarbonyl, (C<sub>1</sub>-C<sub>3</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>3</sub>)alkylaminocarbonyl, and di (C<sub>1</sub>-C<sub>3</sub>)alkylaminocarbonyl;

R<sub>2</sub> is selected from the group consisting of hydrogen and alkoxy;

R<sub>3</sub> is selected from the group consisting of hydrogen, (C<sub>1</sub>-C<sub>6</sub>) alkoxycarbonyl, and carboxy;

R<sub>4</sub> is selected from the group consisting of hydrogen and hydroxy;

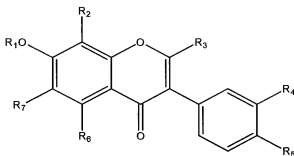
R<sub>5</sub> is selected from the group consisting of hydrogen, carboxy, hydroxy, amino, halo, branched or straight chain (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)haloalkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>3</sub>-C<sub>6</sub>)alkadienyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkoxy, (C<sub>1</sub>-C<sub>6</sub>)haloalkoxy, (C<sub>3</sub>-C<sub>6</sub>)cyclohaloalkoxy, (C<sub>2</sub>-C<sub>6</sub>)alkynyloxy, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkoxyalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkylcarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonylalkyl, (C<sub>1</sub>-C<sub>6</sub>)hydroxyalkyl, substituted or unsubstituted phenyl, phenyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, heterocyclyl, heterocyclyloxy, heterocyclylcarbonyl, wherein substituents are from one to four and are selected from the group consisting of halo, aminocarbonyl, aminothiocarbonyl, carboxy, formyl, hydroxy, amino, carbamoyl, (C<sub>1</sub>-C<sub>3</sub>)alkyl, (C<sub>1</sub>-C<sub>3</sub>)haloalkyl, (C<sub>1</sub>-C<sub>3</sub>)alkoxy, (C<sub>1</sub>-C<sub>3</sub>)haloalkoxy, (C<sub>1</sub>-C<sub>3</sub>)alkylamino, di(C<sub>1</sub>-C<sub>3</sub>)alkylamino, (C<sub>1</sub>-C<sub>2</sub>)alkoxy(C<sub>1</sub>-C<sub>2</sub>)alkyl, (C<sub>1</sub>-C<sub>2</sub>)alkylamino(C<sub>1</sub>-C<sub>2</sub>)alkyl, di(C<sub>1</sub>-C<sub>2</sub>)alkylamino(C<sub>1</sub>-C<sub>2</sub>)alkyl, (C<sub>1</sub>-C<sub>3</sub>)alkylcarbonyl, (C<sub>1</sub>-C<sub>3</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>3</sub>)alkylaminocarbonyl, and di (C<sub>1</sub>-C<sub>3</sub>)alkylaminocarbonyl;

R<sub>6</sub> is selected from the group consisting of hydrogen and hydroxy; and

R<sub>7</sub> is selected from the group consisting of hydrogen and halogen,  
with the proviso that R<sub>5</sub> cannot be hydroxy when R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>6</sub>, and R<sub>7</sub> are all hydrogen

in an amount effective to increase a concentration of 5-hydroxyindoleacetaldehyde formed during catabolism of serotonin or dopamine.

8. A method of modulating alcohol consumption in a mammal comprising administering a compound of Formula I



Formula I

wherein:

R<sub>1</sub> is selected from the group consisting of hydrogen, carboxy, halo, branched or straight chain (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)haloalkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>3</sub>-C<sub>6</sub>)alkadienyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkoxy, (C<sub>1</sub>-C<sub>6</sub>)haloalkoxy, (C<sub>3</sub>-C<sub>6</sub>)cyclohaloalkoxy, (C<sub>2</sub>-C<sub>6</sub>)alkynyloxy, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkoxyalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkylcarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonylalkyl, (C<sub>1</sub>-C<sub>6</sub>)hydroxyalkyl, (C<sub>5</sub>-C<sub>10</sub>)carboxyalkyl, substituted or unsubstituted phenyl, phenyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, heterocyclyl, heterocyclyloxy, heterocyclylcarbonyl, wherein substituents are from one to four and are selected from the group consisting of halo, aminocarbonyl, aminothiocarbonyl, carboxy, formyl, hydroxy, amino, carbamoyl, (C<sub>1</sub>-C<sub>3</sub>)alkyl, (C<sub>1</sub>-C<sub>3</sub>)haloalkyl, (C<sub>1</sub>-C<sub>3</sub>)alkoxy, (C<sub>1</sub>-C<sub>3</sub>)haloalkoxy, (C<sub>1</sub>-C<sub>3</sub>)alkylamino, di(C<sub>1</sub>-C<sub>3</sub>)alkylamino, (C<sub>1</sub>-C<sub>2</sub>)alkoxy(C<sub>1</sub>-C<sub>2</sub>)alkyl, (C<sub>1</sub>-C<sub>2</sub>)alkylamino(C<sub>1</sub>-C<sub>2</sub>)alkyl, di(C<sub>1</sub>-C<sub>2</sub>)alkylamino(C<sub>1</sub>-C<sub>2</sub>)alkyl, (C<sub>1</sub>-C<sub>3</sub>)alkylcarbonyl, (C<sub>1</sub>-C<sub>3</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>3</sub>)alkylaminocarbonyl, and di(C<sub>1</sub>-C<sub>3</sub>)alkylaminocarbonyl;

R<sub>2</sub> is selected from the group consisting of hydrogen and alkoxy;

R<sub>3</sub> is selected from the group consisting of hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, and carboxy;

R<sub>4</sub> is selected from the group consisting of hydrogen and hydroxy;

R<sub>5</sub> is selected from the group consisting of hydrogen, carboxy, halo, amino, branched or straight chain (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)haloalkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>3</sub>-C<sub>6</sub>)alkadienyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkoxy, (C<sub>1</sub>-C<sub>6</sub>)haloalkoxy, (C<sub>3</sub>-C<sub>6</sub>)cyclohaloalkoxy, (C<sub>2</sub>-C<sub>6</sub>)alkynyloxy, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkoxyalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkylcarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonylalkyl, (C<sub>1</sub>-C<sub>6</sub>)hydroxyalkyl, substituted or unsubstituted phenyl, phenyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, heterocyclyl, heterocyclyloxy, heterocyclylcarbonyl, wherein substituents are from one to four and are selected from the group consisting of halo, aminocarbonyl, aminothiocarbonyl, carboxy, formyl, hydroxy, amino, carbamoyl, (C<sub>1</sub>-C<sub>3</sub>)alkyl, (C<sub>1</sub>-C<sub>3</sub>)haloalkyl, (C<sub>1</sub>-C<sub>3</sub>)alkoxy, (C<sub>1</sub>-C<sub>3</sub>)haloalkoxy, (C<sub>1</sub>-C<sub>3</sub>)alkylamino, di(C<sub>1</sub>-C<sub>3</sub>)alkylamino, (C<sub>1</sub>-C<sub>2</sub>)alkoxy(C<sub>1</sub>-C<sub>2</sub>)alkyl, (C<sub>1</sub>-C<sub>2</sub>)alkylamino(C<sub>1</sub>-C<sub>2</sub>)alkyl, di(C<sub>1</sub>-C<sub>2</sub>)alkylamino(C<sub>1</sub>-C<sub>2</sub>)alkyl, (C<sub>1</sub>-C<sub>3</sub>)alkylcarbonyl, (C<sub>1</sub>-C<sub>3</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>3</sub>)alkylaminocarbonyl, and di (C<sub>1</sub>-C<sub>3</sub>)alkylaminocarbonyl;

R<sub>6</sub> is selected from the group consisting of hydrogen and hydroxy; and

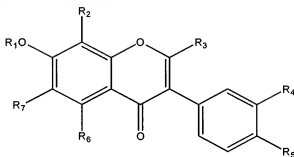
R<sub>7</sub> is selected from the group consisting of hydrogen, halogen, and C<sub>1</sub>-C<sub>6</sub> alkoxy,

in an amount effective to increase a concentration of 5-hydroxyindoleacetaldehyde or 3,4-dihydroxyphenylacetaldehyde formed during catabolism of serotonin or dopamine.

9. The method of claim 7, wherein the mammal is a human.
12. The method of claim 7, wherein the compound does not inhibit monoamine oxidase.
13. The method of claim 7, wherein R<sub>5</sub> is hydroxyl or amino.
14. The method of claim 8, wherein R<sub>1</sub> is a straight chain alkyl.
15. The method of claim 8, wherein R<sub>1</sub> is (C<sub>1</sub>-C<sub>6</sub>)hydroxyalkyl or (C<sub>3</sub>-C<sub>10</sub>)carboxyalkyl.

16. The method of claim 7, wherein the compound is administered intraperitoneally, intramuscularly or orally.

27. A compound for inhibiting ALDH-2 comprising Formula I



Formula I

wherein:

R<sub>1</sub> is selected from the group consisting of hydrogen, carboxy, halo, amino, branched or straight chain (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)haloalkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>3</sub>-C<sub>6</sub>)alkadienyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkoxy, (C<sub>1</sub>-C<sub>6</sub>)haloalkoxy, (C<sub>3</sub>-C<sub>6</sub>)cyclohaloalkoxy, (C<sub>2</sub>-C<sub>6</sub>)alkynyloxy, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkoxyalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkylcarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonylalkyl, (C<sub>1</sub>-C<sub>6</sub>)hydroxyalkyl, (C<sub>5</sub>-C<sub>10</sub>)carboxyalkyl, substituted or unsubstituted phenyl, phenyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, heterocyclyl, heterocyclyloxy, heterocyclylcarbonyl, wherein substituents are from one to four and are selected from the group consisting of halo, aminocarbonyl, aminothiocarbonyl, carboxy, formyl, hydroxy, amino, carbamoyl, (C<sub>1</sub>-C<sub>3</sub>)alkyl, (C<sub>1</sub>-C<sub>3</sub>)haloalkyl, (C<sub>1</sub>-C<sub>3</sub>)alkoxy, (C<sub>1</sub>-C<sub>3</sub>)haloalkoxy, (C<sub>1</sub>-C<sub>3</sub>)alkylamino, di(C<sub>1</sub>-C<sub>3</sub>)alkylamino, (C<sub>1</sub>-C<sub>2</sub>)alkoxy(C<sub>1</sub>-C<sub>2</sub>)alkyl, (C<sub>1</sub>-C<sub>2</sub>)alkylamino(C<sub>1</sub>-C<sub>2</sub>)alkyl, di(C<sub>1</sub>-C<sub>2</sub>)alkylamino(C<sub>1</sub>-C<sub>2</sub>)alkyl, (C<sub>1</sub>-C<sub>3</sub>)alkylcarbonyl, (C<sub>1</sub>-C<sub>3</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>3</sub>)alkylaminocarbonyl, and di(C<sub>1</sub>-C<sub>3</sub>)alkylaminocarbonyl;

R<sub>2</sub> is selected from the group consisting of hydrogen and alkoxy;

R<sub>3</sub> is hydrogen;

R<sub>4</sub> is selected from the group consisting of hydrogen and hydroxy;

R<sub>5</sub> is selected from the group consisting of hydrogen, carboxy, halo, amino, branched or straight chain (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)haloalkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>3</sub>-C<sub>6</sub>)alkadienyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkoxy, (C<sub>1</sub>-C<sub>6</sub>)haloalkoxy, (C<sub>3</sub>-C<sub>6</sub>)cyclohaloalkoxy, (C<sub>2</sub>-C<sub>6</sub>)alkynyloxy, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkoxyalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkylcarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonylalkyl, (C<sub>1</sub>-C<sub>6</sub>)hydroxyalkyl, substituted or unsubstituted phenyl, phenyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, heterocyclyl, heterocyclyloxy, heterocyclylcarbonyl, wherein substituents are from one to four and are selected from the group consisting of halo, aminocarbonyl, aminothiocarbonyl, carboxy, formyl, hydroxy, amino, carbamoyl, (C<sub>1</sub>-C<sub>3</sub>)alkyl, (C<sub>1</sub>-C<sub>3</sub>)haloalkyl, (C<sub>1</sub>-C<sub>3</sub>)alkoxy, (C<sub>1</sub>-C<sub>3</sub>)haloalkoxy, (C<sub>1</sub>-C<sub>3</sub>)alkylamino, di(C<sub>1</sub>-C<sub>3</sub>)alkylamino, (C<sub>1</sub>-C<sub>2</sub>)alkoxy(C<sub>1</sub>-C<sub>2</sub>)alkyl, (C<sub>1</sub>-C<sub>2</sub>)alkylamino(C<sub>1</sub>-C<sub>2</sub>)alkyl, di(C<sub>1</sub>-C<sub>2</sub>)alkylamino(C<sub>1</sub>-C<sub>2</sub>)alkyl, (C<sub>1</sub>-C<sub>3</sub>)alkylcarbonyl, (C<sub>1</sub>-C<sub>3</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>3</sub>)alkylaminocarbonyl, and di (C<sub>1</sub>-C<sub>3</sub>)alkylaminocarbonyl.

R<sub>6</sub> is selected from the group consisting of hydrogen and hydroxy; and

R<sub>7</sub> is selected from the group consisting of hydrogen, halogen, and C<sub>1</sub>-C<sub>6</sub> alkoxy.

28. The compound of claim 26, wherein R<sub>5</sub> is hydroxyl or amino.
29. The compound of claim 27, wherein R<sub>1</sub> is a straight chain alkyl.
30. The compound of claim 27, wherein R<sub>1</sub> is (C<sub>1</sub>-C<sub>6</sub>)hydroxyalkyl or (C<sub>5</sub>-C<sub>10</sub>)carboxyalkyl.